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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/222,340	12/28/1998	WILLIAM F. TERRELL	82771.P279	3304

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EXAMINER
VAUGHN JR, WILLIAM C

ART UNIT	PAPER NUMBER
2143	1.7

DATE MAILED: 02/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/222,340	TERRELL ET AL.
	Examiner	Art Unit
	William C. Vaughn, Jr.	2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 November 2003*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14 and 16-26* is/are pending in the application.

 4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14 and 16-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

 a)☐ All b)☐ Some * c)☐ None of:

 1.☐ Certified copies of the priority documents have been received.

 2.☐ Certified copies of the priority documents have been received in Application No. _____.

 3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

 * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

 a)☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.

4)☐ Interview Summary (PTO-413) Paper No(s). _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: .

DETAILED ACTION

1.   This Action is in regards to the RCE and reply received on 18 November 2003.

Continued Examination Under 37 CFR 1.114

2.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 18 November 2003 has been entered.

3.   The application has been examined. **Claims 1-14 and 16-26** are pending. The objections

and rejections cited are as stated below:

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

5.   **Claims 1-26** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention.

   a.   In claims 1, 13, 20 and 21, the term "dynamically" is a relative term which

   renders the claim indefinite. The term "dynamically" is not defined by the claim, the

   specification does not provide a standard for ascertaining the requisite degree, and one of

   ordinary skill in the art would not be reasonably apprised of the scope of the invention.

   This term is also unclear. If the Applicant is stating that filters are creating on the fly

   (meaning that a program within the bandwidth broker or policy server initiated by the

controller) does this. It is suggested that the Applicant more clearly state how this

dynamic creation or removing of filters actually occurs.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

7.   **Claims 1-4, 7-14, 17, 18, 20, 21, 24 and 25** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Lakshman et al. (Lakshman), U.S. Patent No. 6,341,130 in view of Barzilai et

al. (Barzilai), "Design and Implementation of an RSVP-Based Quality of Service Architecture

for an Integrated Services Internet", 1998.

8.   Regarding **claim 1**, Lakshman discloses the invention substantially as claimed. Lakshman

discloses *an apparatus adapted to facilitate communications between a client device and a*

remote device, comprising a network interface including (i) filters including at least one filter

being triggered to denote when a received packet satisfies filter criteria corresponding to an

admission policy (filter rules) *related to differentiated service levels and associated with the at*

least one filter [see Lakshman, Col. 1, lines 53-67, Col. 2, lines 1-34, Col. 3, lines 53-55, Col. 6,

lines 15-19, Col. 9, lines 20-29] *and (ii) a classifier, communicatively coupled to the filters, to*

classify and mark one of the service levels associates with the received data packet in response

to satisfying the filter criteria associated with the at least one filter [see Lakshman, Col. 53-67];

and a controller [see Lakshman, Figure, 1, item 245]. However, Lakshman does not explicitly

disclose a controller coupled to the network interface, to dynamically create and remove the filters controlling access to the different service levels based, at least in part, on an admission profile of the admission policy. By this rationale **claim 1** is rejected.

9.   In the same field of endeavor, Barzilai discloses (e.g., a system for traffic policing, traffic shaping and buffer management for QOS support). Barzilai discloses and a controller coupled to the network interface, to dynamically create and remove the filters controlling access to the different service levels based, at least in part, on an admissions profile (Barzilai teaches the QOS manager functions a control plane component primarily responsible for the creation, modification, and removal of reservation filters associated with different flows as well as admission control. Also, Barzilai teaches the improvement of statically compiled packet filter by utilizing a general classifier for real-time packet forwarding and packet filters that provide general and flexible classification of incoming packets to application endpoints and dynamic code generation techniques that are applied to realized very efficient packet filters), [see Barzilai, page 400, 2nd column, 4th paragraph, page 411, 2nd column, 2nd paragraph].

10.   Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Barzilai teaches of a system for traffic policing, traffic shaping and buffer management for QOS support with the teachings of Lakshman, for the purpose of providing a system that supports integrated services on the Internet, network routers as well as end hosts in order to further enhance classification of traffic and to handle data packets from different flows as well as having a system that fully supports TCP/IP stack [see Barzilai, page 397, column 2]. By this rationale **claim 1** is rejected.

11.   Regarding **claim 2**, Lakshman-Barzilai further discloses *wherein the at least one filter,*

when triggered, initiate an admission control decision preventing allocation of service level

resources which are not yet required or authorized [see Barzilai, page 410, 2nd paragraph]. By

this rationale **claim 2** is rejected.

12.   Regarding **claim 3**, Lakshman-Barzilai further discloses *wherein each filter is triggered*

by information contained within received the data packet (Barzilai teaches that the address is

used during data transfer to efficiently identify the reservation structure to use for policing and

shaping traffic on a particular data socket), [see Barzilai, Page 404, 1st Col., 2nd paragraph]. By

this rationale **claim 3** is rejected.

13.   Regarding **claim 4**, Lakshman-Barzilai further discloses *wherein each filter is triggered*

by one or both of packet source information and packet destination information [see Lakshman,

Col. 2, lines 10-14]. By this rationale **claim 4** is rejected.

14.   Regarding **claim 7**, Lakshman-Barzilai further discloses *wherein the admission profile is*

available locally within the apparatus [see Lakshman, Col. 15, line 13]. By this rationale **claim**

7 is rejected.

15.   Regarding **claim 8**, Lakshman-Barzilai further discloses *wherein the controller*

establishes an ingress profile in response to detecting an associated trigger event, wherein the

ingress profile modifies the received data packet adhering to the filter criteria to denote a

particular service level, in accordance with the admissions profile [see Barzilai, page 406, 2nd].

By this rationale **claim 8** is rejected.

16.   Regarding **claim 9**, Lakshman-Barzilai further discloses *wherein the controller removes*

ingress profiles when data packets adhering to the filter criteria are no longer received,

liberating apparatus resources [see Barzilai, page 406, 2nd column, 4th paragraph]. By this

rationale **claim 9** is rejected.

17.   Regarding **claim 10**, Lakshman-Barzilai further discloses *wherein the controller removes*

ingress profiles after a predetermined period of time, liberating apparatus resources [Barzilai,

page 410, 1st column, 1st paragraph-3rd paragraph]. By this rationale **claim 10** is rejected.

18.   Regarding **claim 11**, Lakshman-Barzilai further discloses *wherein the controller removes*

at least one of the filters in accordance with a network administration policy [see Barzilai, page

410, 1st column, paragraph 1, Figure 9]. By this rationale **claim 11** is rejected.

19.   Regarding **claim 13**, Lakshman-Barzilai further discloses *a method for controlling*

provisions of differentiated service levels in a data network [see Barzilai, abstract], *the method*

comprising (a) installing a filter on a network edge device to provide a trigger notification upon

detecting data packets adhering to filter criteria, [see rejection of **claim 1, supra**] *(b)*

determining whether a received data packet satisfies the filter criteria, the filter criteria

corresponding to an admission policy related to the differentiated service levels [see rejection of

claim 1, supra]; *and (c) issuing a command by a bandwidth broker to a controller of the network*

edge device to dynamically install or remove a filter in response to determining whether the

received data packets satisfies the filter criteria [see rejection of claim 1, supra]. By this

rationale **claim 13** is rejected.

20.   Regarding **claim 14**, Lakshman-Barzilai further discloses *(d) marking the received data*

packets adhering to the filter criteria according to a subscribed service level (Barzilai teaches

that the QOS manager tags the data path with a session handle to enable handling of data

packets commensurate with their service requirements), [see Barzilai, page 398, 1st column, 1st

paragraph]. By this rationale **claim 14** is rejected.

21.   Regarding **claim 17**, Lakshman-Barzilai further *discloses (e) identifying and marking the*

received data packets with routing information in accordance with the subscribed service level

[see rejection of claim 14, supra]. By this rationale **claim 17** is rejected.

22.   Regarding **claim 18**, Lakshman-Barzilai further discloses *(f) placing the data packets in a*

proper format for transmission (Barzilai teaches TCP formats packets into a acceptable form for

transmission to the network), [see Barzilai, page 407, 2nd column, 2nd paragraph]. By this

rationale **claim 18** is rejected.

23.   Regarding **claim 20**, Lakshman-Barzilai further discloses *wherein the controller further*

dynamically controls access to at least one classifier profile in accordance with the admission

profile [see Barzilai, page 411, 2nd column, 2nd paragraph]. By this rationale **claim 20** is

rejected.

24.   Regarding **claim 21**, Lakshman-Barzilai further discloses *an apparatus adapted to*

facilitate communications between a client device and a remote device [see rejection of claim 1,

supra], *comprising: filter means for controlling access to different service levels* [see rejection of

claim 1, supra]; *means for classifying and marking one of the service levels associated with the*

received data packet in response to satisfying filter criteria associates with the filter means [see

rejection of claim 1, supra]; *and control means for dynamically creating and removing a portion*

of the filter means based at least in part on an admission profile [see rejection of claim 1, supra].

By this rationale **claim 21** is rejected.

25.   Regarding **claim 24**, Lakshman-Barzilai further discloses *wherein the filter means*

comprises a plurality of filters [see rejection of claims 1 and 21, supra]. By this rationale **claim**

24 is rejected.

26.   Regarding **claim 25**, Lakshman-Barzilai further discloses *wherein the control means*

removes at least one of the filters in accordance with a network administration policy [see

Barzilai, page 400, 2nd column, 4th paragraph]. By this rationale **claim 25** is rejected.

Claim Rejections - 35 USC § 103

27.   **Claims 5, 6, 16, 19, 22, 23** are rejected under 35 U.S.C. 103(a) as being unpatentable

over Lakshman-Barzilai as applied to claims 1, 13, 14, 21 above, and further in view of Gai et al.

(Gai), U.S. Patent No. 6,651,101.

28.   Regarding claim 5, Lakshman-Barzilai discloses the invention substantially as claimed.

However, Lakshman-Barzilai does not explicitly disclose wherein the admission profile is stored

in a communicatively coupled remote device.

29.   In the same field of endeavor, Gai discloses (e.g., identifying network data traffic flows

and for applying quality of service treatments to the flows). Gai discloses wherein the admission

profile is stored in a communicatively coupled remote device [see Gai, Col. 12, lines 25-50].

30.   Accordingly, it would have been obvious to one of ordinary skill in the networking art at

the time the invention was made to have incorporated Gai's teachings of identifying network

data traffic flows and for applying quality of service treatments to the flows with the teachings of

Lakshman-Barzilai, for the purpose of obtaining traffic policies to be applied to identified traffic

flows [see Gai, Col. 4, lines 26-65]. By this rationale **claim 5** is rejected.

Regarding **claim 6**, Lakshman-Barzilai further discloses *wherein the communicatively coupled remote device is a bandwidth broker or other generic policy server* [see Gai, Figure 2, item 216]. By this rationale **claim 6** is rejected.

31.   Regarding **claim 16**, Lakshman-Barzilai and Gai discloses *wherein the marking of the received data packet includes setting a logic value of a bit in a Type of Service (ToS) field of a header of the data packet* [see Gai, Col. 3, lines 1-32, Col. 16, lines 21-48 and Col. 20, lines 25-31]. By this rationale **claim 16** is rejected.

32.   Regarding **claim 19**, Lakshman-Barzilai and Gai discloses *wherein the classifier marks a Type of Service (ToS) field of the received data packet to denote a level of service for transmission of the data packet* [see Gai, Col. 3, lines 1-32, Col. 16, lines 21-48 and Col. 20, lines 25-31]. By this rationale **claim 19** is rejected.

33.   Regarding **claim 22**, Lakshman-Barzilai and Gai further discloses *wherein the admissions profile is stored in a communicatively coupled remote device* [see Gai, Col. 12, lines 25-50]. By this rationale **claim 22** is rejected.

34.   Regarding **claim 23**, Lakshman-Barzilai further discloses *wherein the communicatively coupled remote device is a bandwidth broker or other generic policy server* [see Gai, Figure 2, item 216]. By this rationale **claim 23** is rejected.

Claim Rejections - 35 USC § 103

35.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

36.   **Claims 12 and 26** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Lakshman-Barzilai as applied to claims 1, 11, 21, 24 and 25 above, and further in view of in

view of what was well known to the ordinary artisan in the networking art at the time the

invention was made.

37.   Regarding **claims 12 and 26**, Lakshman-Barzilai further discloses *wherein the control*

means removes at least one of the filters based, at least in part, on time-of-day ((The inclusion of

wherein the control means removes at least one of the filters based, at least in part, on time-of-

day would have been obvious to one of ordinary skill in the networking art at the time the

invention was made in view of the notoriously widely known and widely implementation of

control means removes at least one of the filters based, at least in part, on time-of-day. The

Examiner takes Official Notice (MPEP 2144.03) that "a network administrator having the

capability to remove filters base on an expiration day or time of data is well known in the

networking art at the time the invention. The Applicant is entitled to traverse the official notice

according to MPEP 2144.03. However, MPEP 2144.03 further states, "See also In re Boon, 439

F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain

adequate information or argument to create on its face a reasonable doubt regarding the

circumstances justifying the judicial notice)." Specifically, In re Boon, 169 USPQ 231, 234

states "as we held in Ahlert, an applicant must be given the opportunity to challenge either the

correctness of the fact asserted or the notoriety or repute of the reference cited in support of the

assertion. We did not mean to imply by this statement that a bald challenge, with nothing more,

would be all that was needed". Further 37 CFR 1.671©(3) states "Judicial notice means official

notice". Thus, a traversal by the Applicant that is merely "a bald challenge, with nothing more"

will be given little weight). By this rationale **claims 12 and 26** are rejected.

Response to Arguments

38.   Applicant's arguments include the failure of previously applied art to expressly disclose

dynamically create and remove the filters controlling access to the different service levels. See

Response, Paper#, 16 pages 7-8. It is evident from the detailed mappings found in the above

rejection(s) that Lakshman-Barzilai, Gai disclosed this functionality. Further, it is clear from the

numerous teachings (previously and currently cited) that the provision for dynamically create

and remove the filters controlling access to the different service levels, was widely implemented

in the networking art. Thus, Applicant's arguments drawn toward distinction of the claimed

invention and the prior art teachings on this point are not considered persuasive.

39.   Again, it is the Examiner's position that Applicant has not yet submitted claims drawn to

limitations, which define the operation and apparatus of Applicant's disclosed invention in

manner, which distinguishes over the prior art. As it is Applicant's right to continue to claim as

broadly as possible their invention. It is also the Examiner's right to continue to interpret the

claim language as broadly as possible. It is the Examiner's position that the detailed

functionality that allows for Applicant's invention to overcome the prior art used in the rejection,

fails to differentiate in detail how these features are unique (see pages 14). As it is extremely

well known in the networking art as already shown by Lakshman-Barzilia, Gai and other prior

arts of records disclosed, dynamically create and remove the filters controlling access to the

different service levels as well as other claimed features of Applicant's invention. Thus, it is

clear that Applicant must submit amendments to the claims in order to distinguish over the prior

art use in the rejection that discloses different features of Applicant's claim invention. It is

requested that Applicant provide more details in regards to the dynamic creations, removing of

filters.

40.   Applicant has had numerous opportunities to amend the claimed subject matter, and has

failed to modify the claim language to distinguish over the prior art of record by clarifying or

substantially narrowing the claim language. Thus, Applicant apparently intends that a broad

interpretation be given to the claims and the Examiner has adopted such in the present and

previous Office action rejections. See In re Prater and Wei, 162 USPQ 541 (CCPA 1969), and

MPEP 2111.

41.   Applicant employs broad language, which includes the use of word, and phrases, which

have broad meanings in the art (dynamically create, control and remove). In addition, Applicant

has not argued any narrower interpretation of the claim language, nor amended the claims

significantly enough to construe a narrower meaning to the limitations. As the claims breadth

allows multiple interpretations and meanings, which are broader than Applicant's disclosure, the

Examiner is forced to interpret the claim limitations as broadly and as reasonably possible, in

determining patentability of the disclosed invention. Although the claims are interpreted in light

of the specification, limitations from the specification are not read into the claims. See In re Van

Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir.1993).

42.   Failure for Applicant to significantly narrow definition/scope of the claims and supply

arguments commensurate in scope with the claims implies the Applicant intends broad

interpretation be given to the claims. The Examiner has interpreted the claims with scope

parallel to the Applicant in the response, and reiterates the need for the Applicant to more clearly

and distinctly, define the claimed invention.

Citation of Pertinent Prior Art

43.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

        a.   Schneider et al. (Schneider), U.S. Patent No. 6,105,027, discloses a plurality of

access filters that have a set of rules (policies), which indicate which destinations may

receive IP packets from which sources, and if the source and destination specified in the

header do not conform to these rules, the packet is discarded and filters expiring [see

Schneider, Col. 3, lines 32-58].

        b.   Engel et al. (Engel), U.S. Patent No. 6,519,636, discloses that rules (filters) can be

added to the rule set, deleted from the rule set, or modified in order to classify,

manipulate, and/or control the communication of packets [see Engel, Abstract].

        c.   Wittig et al. (Wittig), "Network Layer Scaling : Congestion Control in

Multimedia Communication with Heterogeneous Networks and Receivers", discloses

dynamic filtering as well as a relaxation parameter that includes a duration parameter [see
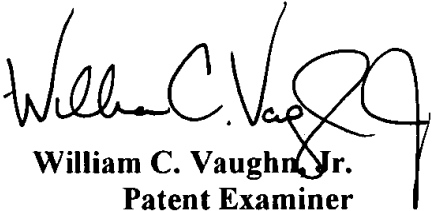
page 280, section 4 and section 5].

Conclusion

44.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to William C. Vaughn, Jr. whose telephone number is (703) 306-

9129. The examiner can normally be reached on 8:00-6:00, 1st and 2nd Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David A Wiley can be reached on (703) 308-5221. The fax phone number for the

organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-9700.

<div style="text-align: right;">

William C. Vaughn, Jr.
Patent Examiner
Art Unit 2143
20 January 2004

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